

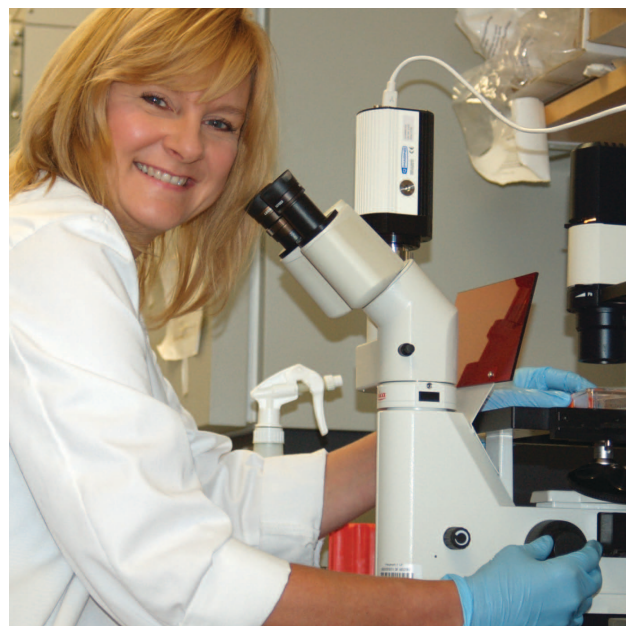
## Saving a Generation: Controlling Diabetes

By Betsy B. Dokken, NP, PhD

Assistant Professor of Medicine/Endocrinology

The link between obesity and diabetes is well accepted, but why is it that some people become obese on the same diet and exercise program that maintains a healthy body weight in others and how does this correlate to diabetes? Scientists are studying endocrine-disrupting chemicals found in our environment called “obesogens” to gain a better understanding.

Simply defined, obesity is caused by consuming more calories than the body needs, either by overeating or living a sedentary life, or both. However, the cause of this imbalance is not always behavioral. Many researchers are finding that the rates at which calories are stored and burned are different between lean and obese people. In addition, there is strong evidence that endocrine-disrupting chemicals, highly prevalent in our environment, also contribute to the propensity toward weight gain in people who are genetically predisposed. It may sound like science fiction, but the American Medical Association, the National Institutes of Health, and the Endocrine Society have all declared these toxins, called obesogens, as factors in the obesity epidemic. This means that those predisposed to obesity must eat less and exercise more (than those not predisposed) in order to maintain a healthy weight. However, despite the complexity of the science behind obesity, there is no argument that a change in lifestyle that leads to a healthy weight may prevent type-2 diabetes. This is different than type 1, or juvenile diabetes, which typically



*Betsy Dokken, NP, PhD, provides diabetes care and conducts basic science research to advance the understanding of this cardiovascular disease.*

requires insulin therapy. Type-2 diabetes usually occurs later in life and initially does not require insulin therapy.

### The relationship between obesity and type-2 diabetes

Obesity leads to type-2 diabetes in several ways. First, in obesity, fat is stored in or near the pancreas, liver and muscles—organs critical for normal fuel metabolism. The accumulation of fat in these tissues (that don’t normally store it) interferes with the capacity to make insulin (in the pancreas) and to respond to it (in liver and muscle). In addition, fat cells (called adipocytes) secrete hormones (called adipokines) that can dramatically affect

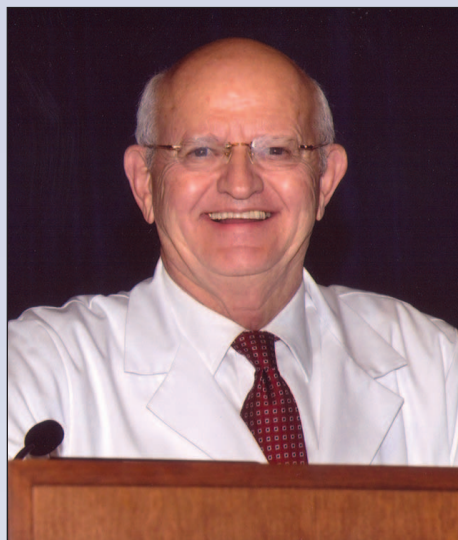


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## ...from the Director

Our cover story is about diabetes. Why diabetes? Because diabetes is a cardiovascular as well as an endocrinologic disease! The incidence of cardiovascular disease in men with diabetes is twice that of non-diabetic men and among women the incidence is three times that compared with non-diabetic women. An adult with diabetes has nearly the same prognosis as a non-diabetic patient who has survived their first heart attack! While the incidence of cardiovascular disease is decreasing as more and more individuals are being treated for the classic cardiovascular risk factors of high blood pressure, smoking, and abnormal lipids, the incidence of diabetes is increasing! (Note that abnormal lipids include an LDL or “bad” cholesterol that is too high, an HDL or “good” cholesterol that is too low, or an inherited lipoprotein little a – Lp(a) – that is too high.)

Contributing to the increase of diabetes is our epidemic of obesity. Being overweight or obese increases the risk of diabetes. We are born with a certain number of fat cells, and when one gains weight, the number of fat cells does not increase significantly—the fat cells just get larger. And as they get bigger, their cell surface is stretched and they become more



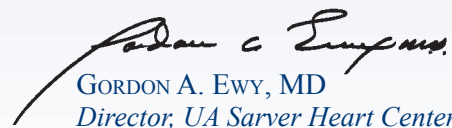
insulin resistant—thus obesity increases the incidence of diabetes. Thus with our current epidemic of obesity, especially in the population of patients with “survival genes”—those who were able to survive on limited calories in the past, such as Native Americans and others—the risk is especially great. If one is not concerned about our epidemic of obesity, I suggest that you visit the beach any day of the summer!

Being aware of the problem is the necessary first step. The second step is to address the risk factors for cardiovascular disease: smoking, high blood pressure, abnormal lipids and obesity. If you smoke, quit! There are some new medications to help one discontinue smoking, but making the decision and having the will to stop is the most important first step. High

blood pressure, the cause of many strokes, heart attacks and kidney failure, can now be controlled. It takes an average of three or four different medications, all working on different mechanisms that contribute to high blood pressure, to effectively control it. Fortunately almost everyone’s high blood pressure now can be controlled cost effectively as the most common medications required: a diuretic, an ACE-inhibitor or an ARB antagonist, a vasodilator and spironolactone, are all generic! The approach is to begin with one, record the blood pressure at home (more predictive than those taken in the doctor’s office), and gradually add additional medications as needed.

As the cover story notes, genetics is a major cause of diabetes. As noted above, lifestyle is also a contributing factor. In addition to treating the diabetes, one also has to aggressively manage the diabetic’s other risk factors for coronary heart disease and stroke.

The members of the Sarver Heart Center are concerned about everything that contributes to or decreases the ravages of cardiovascular diseases, including diabetes.

  
GORDON A. EWY, MD  
Director, UA Sarver Heart Center

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a person's sensitivity to insulin. High-insulin sensitivity is normal, meaning that insulin secreted by the pancreas is very effective at controlling the blood sugar. Low-insulin sensitivity, also called insulin resistance, is the hallmark of type-2 diabetes. Because of the abnormal fat storage and the secretion of adipokines, the more excess body fat a person carries, the more they are prone to insulin resistance and type-2 diabetes.

However, determining a direct cause-effect relationship between obesity and type-2 diabetes is still problematic because the correlation is not perfect. Many obese people never develop diabetes, and many people with a healthy body weight still develop the disease. Genetic predisposition plays a strong role in the development of type-2 diabetes. That said, prevention still may be possible in those with a family history of the disease.

### **The diabetes epidemic**

Due to the strong relationship between obesity and type-2 diabetes, the prevalence of diabetes parallels the obesity epidemic. Diabetes is now nearly four times more common than all forms of cancer combined, and causes more deaths than breast and prostate cancer combined. Studies estimate that more than half of all Americans will develop diabetes or pre-diabetes by the year 2020, unless preventive strategies are widely implemented. The diabetes epidemic is not limited to the United States. Type-2

diabetes is becoming very common almost everywhere in the world and globally the prevalence has more than doubled since 1980, with an estimated 347 million people diagnosed with the disease. In fact, the Pacific Island nations now have the highest prevalence of diabetes in the world, with one-third of all women and one-fourth of all men afflicted.

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### **High prevalence among children and teens**

As recently as 20 years ago, type-2 diabetes was rare in children and adolescents. Now, the disease occurs with alarming frequency.

Even more disturbing is a recent finding that in young people between the ages of 10 and 17, type-2 diabetes appears to be an aggressive form, somewhat resistant to typical treatment. In addition, research demonstrates that once the disease develops in children and adolescents, it is incredibly difficult to implement healthy lifestyle changes. Nor, is it easy to convince children to take recommended medication, even if it is oral. These findings stress the importance of diabetes prevention, since the risks of diabetes complications, such as heart disease, increase each year a person lives with the disease.

### **Weight control**

Modest weight loss through improved diet and increased physical activity can prevent pre-diabetes from progressing to diabetes. Pre-diabetes refers to blood sugar (glucose) levels

## **Summary of research focus**

Dr. Dokken and her team are studying the relationship between diabetes and dysfunction of the small blood vessels in the heart, called "coronary microvascular dysfunction." This condition causes poor blood flow throughout the heart and can predispose diabetic patients to heart attacks and heart failure. Dr. Dokken, in collaboration with other UA Sarver Heart Center members, found that a naturally-occurring hormone called glucagon-like peptide-1 (GLP-1) prevents coronary microvascular dysfunction after cardiac arrest and resuscitation.

Coronary microvascular dysfunction is more prevalent in women than in men and common in diabetes; therefore diabetic women have the highest rates of this disorder. The Dokken lab is currently conducting experiments in female diabetic animal models and specialized coronary blood vessel cells from diabetic female donors to test the hypothesis that GLP-1 will improve coronary microvascular function in diabetic women. The UA Sarver Heart Center has been highly instrumental in making this research possible through the following grants:

- The Bettie F. Pitts Memorial Heart Disease Research Award, 2007
- The Ralph and Shirley Morgan Gift, 2011
- The Dr. Harold and Mrs. Nancy Willingham Gift, 2012
- The Heart Disease in Women Research Award, 2012

between 100 and 125 milligrams per deciliter of blood (mg/dL). Normal fasting blood sugar is less than 100 mg/dL. The Diabetes Prevention Program, co-sponsored by the National Institutes of Health and the American Diabetes Association, demonstrated over a five-year period that a 7 percent weight loss achieved through a low-calorie diet and a minimum of 150 minutes per week of exercise (mainly walking) decreased by 58 percent the risk of progression from pre-diabetes to diabetes. This decrease in body fat was apparently enough to cause a reduction in fat storage in those critical tissues mentioned above, reversing some of the insulin resistance. Exercise is perhaps the behavior most effective at decreasing insulin resistance (improving insulin sensitivity). Muscle contraction stimulates the movement of sugar from the blood into muscle cells where it is needed to fuel the contraction. Consistent exercise over time can increase the production of enzymes necessary for proper fuel metabolism.

Diet is also very important. Food intake is a critical regulator of metabolism. Researchers have found that type-2 diabetes improves, at

least temporarily, in response to an extreme reduction in caloric intake, even before any weight is lost. In addition, many diabetic patients (but not all), who have undergone bariatric (weight-loss) surgery, experience a very rapid reduction in blood sugar levels, also before a significant amount of weight is lost. Therefore, what we ingest regulates many bodily functions aside from the effect on our body weight. Again, the science related to these phenomena is complex and

still not completely understood. What is clear about the relationship between diet, obesity and type-2 diabetes is that a healthy, low-calorie diet is necessary for optimal control of both. As summarized above, lifestyle recommendations should be individualized—there is no “one size fits all” approach. For individualized recommendations on the management of body

weight, pre-diabetes and diabetes through proper nutrition, request an appointment with an expert registered dietitian (RD). Ask your primary care provider for a referral. The University of Arizona Medical Center has a number of knowledgeable RDs who can be reached by calling 520-694-8888.♥

Even more disturbing is a recent finding that in young people between the ages of 10 and 17, type-2 diabetes appears to be an aggressive form, somewhat resistant to typical treatment.

Over a five-year period, a 7 percent weight loss achieved through a low-calorie diet and a minimum of 150 minutes per week of exercise (mainly walking) decreased the risk of progression from prediabetes to diabetes by 58 percent.





# Sarver Heart Center's "Young Investigator Awards" Help Obtain National Funding

When a medical researcher is intrigued by a question that may lead to a breakthrough in knowledge and treatment, the first step is often the most difficult: obtain funding to collect data to determine if the research shows promise. A **Sarver Heart Center Investigator Award** helped **Hussein Yassine, MD**, gather the data necessary to compete successfully for a career development award from the National Institutes of Health and a clinical research award from the American Heart Association.

High-density lipoprotein (HDL) cholesterol is an important, but inadequately understood type of cholesterol. In most patients, the higher the good cholesterol blood level, the better; but in others, it does not appear to be protective. As a postdoctoral fellow in endocrinology, Dr. Yassine was struck by a medical presentation on "good" or HDL cholesterol. He wondered if proteins attached to HDL cholesterol influenced its function. Dr. Yassine met with his research mentor a few weeks later to ask her if he could study this question by using mass spectrometry. This was not a project he or his mentor were doing in their laboratory and "I did not have any money to test an idea that may or may not work," said Dr. Yassine. When he contacted the Sarver Heart Center director, he found that as a new member, he was eligible to apply for an Investigator Award.

Dr. Yassine, an assistant professor of clinical medicine in the Section of Endocrinology, applied for the Sarver Heart Center's *Ron and Anne Walker Investigator Award*. "I had not much of a track record from a publication standpoint. I was almost sure that the Sarver Heart committee would not take my application seriously," he wrote in a letter to Dr. Gordon Ewy.

"A few months later, I was notified of the award. I started searching the University, looking for a very



*Hussein Yassine, MD, obtained national funding for his lipids research after gathering necessary data to make his grant application competitive. His preliminary research was funded in part by the Ron and Anne Walker Award (photo inset).*

high-speed ultracentrifuge and after digging into several shared-equipment sheets of BIO5, Cancer Center, Medical Research Building and College of Pharmacy, I found one in the Gregorio Sarver Heart Center research laboratory. "She (Carol Gregorio, PhD) was gracious enough to let me use it. To my surprise, the experiment worked. I found 60 proteins attached to good cholesterol."

"Two years later, I transitioned into an endocrine junior faculty position, and was able to obtain another Sarver Heart Center award. With the *Edward and Virginia Madden Award*, I developed a functional assay and was able to hire a lab technician. Now, I have National Institute of Health (NIH) and national American Heart Association funding to study the role of proteins attached to HDL. This \$1 million support of my research over five years would not have been possible without a \$5,000 grant from the Sarver Heart Center to a junior investigator. Thank you, for supporting junior research investigators like me," wrote Dr. Yassine. ♥

# New Antithrombotic Therapy for Treating Atrial Fibrillation

By Julia H. Indik, MD, PhD



There's a new choice for preventing stroke these days for patients who have atrial fibrillation, which is the most common heart-rhythm disorder in patients over the age of 60. It causes the heart to beat erratically and can lead to a stroke in susceptible people.

Who are those at risk for stroke due to atrial fibrillation? Anyone over age 75 or people with high-blood pressure (treated or untreated), diabetes or heart failure are at significant risk. People ages 65 to 74 with a prior history of heart attack and women are at moderate risk. Without question of course, those who have had a prior stroke are at highest risk for another one.

Traditionally, we have always recommended warfarin (also called Coumadin) for people at risk for stroke due to atrial fibrillation. However, this has been a “hard pill to swallow” for most. For one thing, warfarin interacts with many other medications and foods, creating a

situation where the blood can swing from being “too thick” to “too thin.” As a result, many people are forced to have frequent blood tests to check how warfarin affects their blood. This is done by measuring the “International Normalized Ratio” (INR), which we want to be between the values of 2 and 3.

However, in the last two years there are finally new choices to substitute for warfarin for most patients with atrial fibrillation. Two drugs that are currently approved by the FDA, and hopefully a third will join the ranks in the next few months, work on a different part of the clotting pathway and in a far more predictable way than warfarin. Dabigatran (also called pradaxa) works on a protein called “thrombin,” while rivaroxaban (also called xarelto) works on a protein called “Xa.” These proteins are critical for making the blood clot, and by inhibiting their action, these drugs keep the blood thin.

These drugs have been studied in three major trials, each including about 15,000 to 18,000 patients with atrial fibrillation, with half taking warfarin and half taking the new drug. The first new drug, Dabigatran (pradaxa), showed itself to be superior to warfarin for preventing stroke, with about the same risk for major overall bleeding as warfarin though with a slight increase in gastrointestinal bleeding. Importantly, dabigatran showed less risk for a bleeding



stroke (“hemorrhagic stroke”), which is the most deadly type. Dabigatran was approved by the FDA in 2010, and generally is prescribed as 150 mg twice daily.

The next drug to receive FDA approval was rivaroxaban (xarelto) in 2011. It was studied in the ROCKET-AF trial and found to be equal to warfarin in preventing stroke with a similar risk for major overall bleeding and, like dabigatran, had less risk for a bleeding stroke. Rivaroxaban is generally prescribed as 20 mg once daily.

Finally, apixaban, studied in the ARISTOTLE trial, is still awaiting approval from the FDA, and was demonstrated not only to be superior to warfarin to prevent stroke, but also to be superior to warfarin for major bleeding.

These are exciting new choices for prevention of stroke for patients with atrial fibrillation, but this does not mean that we should abandon warfarin. Patients who have taken warfarin successfully should continue to do so. In other words, “if it ain’t broke, don’t fix it.” Also, some medical conditions, such as very severe kidney failure, still warrant the use of warfarin. And, cost is an issue, too. Not all insurance companies cover these drugs or at a level that makes them affordable. In the end though, it’s a choice to be made between the patient and physician.

*Dr. Indik is an associate professor of medicine and director of the Cardiovascular Disease Fellowship Program at the UA College of Medicine, Section of Cardiology; and holds the Flinn Foundation and American Heart Association Endowed Chair in Electrophysiology in the UA Sarver Heart Center. ♥*

## Join Us



7th Annual

# The Heart of the Matter

An Educational Luncheon  
on Heart Disease in Women

**October 13, 2012**

Doubletree Hotel at Reid Park  
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**It's all about women's  
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(Men can attend too!)

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beginning August 15, 2012

**For more information please call  
(520) 626-2901**

Presented by the Sarver Heart Center Women's Heart  
Health Education Committee

The registration fee is not a tax-deductible contribution  
and is not refundable.

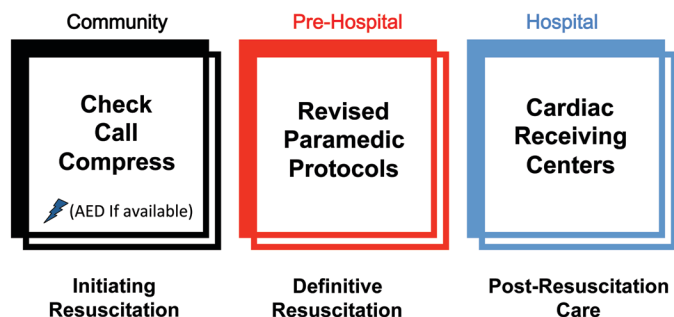


*Honoring a hero (l. to r.) Tucson Mayor Jonathan Rothschild, John Lund, a cardiac arrest survivor; Michael Parente, John's rescuer; Andrew Quigley, assistant city manager; and Jim Critchley, chief of Tucson Fire Department.*

## Compressions Continue to Save Lives

### UA SHC Cardiocerebral Resuscitation

(for primary cardiac arrest)



Since UA Sarver Heart Center and the Arizona SHARE Network started collecting data at the end of 2004, about 1,000 lives have been saved in Arizona because someone responded to a sudden cardiac arrest with the "new CPR," called cardiocerebral resuscitation, developed at the UA Sarver Heart Center, that includes chest-compression-only CPR. Here are some great examples of recent successes.

#### UA College of Pharmacy Alumna

Padma Sundareshan, PharmD, a 2009 graduate of the UA College of Pharmacy, is credited with saving a man's life by quickly assessing a serious situation and administering CPR until paramedics arrived.

Dr. Sundareshan was at work one evening at a

Walgreens pharmacy in Oro Valley, Ariz. A couple was waiting to receive flu shots. Suddenly the wife cried out that her husband had stopped breathing (apparently from cardiac arrest).

Dr. Sundareshan ran out of the pharmacy and, with help, laid the gentleman on the floor and then began performing CPR. She administered two breaths then switched to chest-compression-only CPR.

When paramedics arrived, the patient still did not have heart rhythm or a pulse. The paramedics took over and administered an AED shock. When the patient was on a stretcher and being moved out to the ambulance, Dr. Sundareshan heard one of the paramedics say, "We have a pulse."

A few days later, the patient's wife called the Walgreens store manager to express her gratitude for Dr. Sundareshan's help. She said the doctors in the emergency room told her that the only reason her husband is still here is that Dr. Sundareshan performed



*Padma Sundareshan, PharmD.*



chest-compression-only CPR until the paramedics arrived.

“Definitely the training I received as a student at UA positively helped me in this situation,” says Dr. Sundareshan. “The feeling that you may have played a role in saving someone else’s life knows no other greater satisfaction (or pleasure) in life for a human being.”

### **Along the Recycling Truck Route**

This past January, John Lund went out for a morning run and suddenly realized he didn’t feel well. He decided he needed to lay down near the street so someone would see him if he passed out. Moments later, Michael Parente, a City of Tucson Environmental Services employee, was driving his recycling route when he found John unconscious on the sidewalk. Michael called 911 and began chest-compression-only CPR (CCO-CPR), which he continued until paramedics arrived.

John, who had a blocked coronary artery, had a long, but remarkable recovery. He wrote to Tucson Mayor Jonathan Rothschild to thank Michael and the Tucson Fire Department for saving his life.

“Physicians credit Mr. Lund's lack of neurological impairment not only to the chest-compression-only CPR technique, used by Mr. Parente, but also cardiocerebral resuscitation by TFD paramedics and improved therapy by a cardiac-receiving-center hospital,” said Mayor Rothschild, who has been a supporter of the “Be A Lifesaver Tucson” CCO-CPR education program. In 2003, the Tucson Fire Department was the first agency to help the UA Sarver Heart Center pioneer the use of cardiocerebral resuscitation, including CCO-CPR, a technique that has proven to be more beneficial than standard CPR in cases of primary cardiac arrest.

At TFD's Annual Award Ceremony this past Spring, the mayor presented Michael with a plaque while John thanked his rescuer. “I can’t tell you how grateful I am. If it wasn’t for Michael, I wouldn’t be here,” said John.

“I hope people will take the time to learn this lifesaving technique. You never know when an emergency is going to happen,” said Mayor Rothschild.



*Cardiac arrest survivor John Lund hugs his rescuer, Michael Parente, a City of Tucson Environmental Services truck driver who just happened to be driving by at the right time.*

To learn about chest-compression-only CPR, visit the Sarver Heart Center website: [heart.arizona.edu](http://heart.arizona.edu) and click on “Learn CPR.”

### **Kansas Town Experiences the Joy of “Saves”**

When Hays, Kans., decided they needed to do something to improve outcomes from sudden cardiac arrest, the town of 20,500 people turned to a native son—Gordon A. Ewy, MD, who was born in Brenham, Kans., a town where 40 percent of the people grew up to be physicians—that would be Dr. Ewy and his brother.

Fortunately, Dr. Ewy’s lengthy career focus has been dedicated to improving survival from sudden cardiac arrest. In 2011, Dr. Ewy shared with emergency responders and the Hays community how cities in Arizona and other states are addressing this major public health issue, including educating people about chest-compression-only CPR and new protocols for emergency responders.

One of the physicians in Hays recently sent Dr. Ewy an update on the town’s experience since adopting these new responses: “Last year, we had 12 cardiac arrests and none survived. This year we’ve had 11 and six have survived, including a 45-year-old physician.”

### **911 Dispatchers Tell, Not Ask, Callers to Start Chest Compressions**

A change in how emergency dispatchers in Arizona handle 911 sudden cardiac arrest calls shows great promise for further increasing survival rates. In the past, dispatchers would ask callers if they were willing to start CPR. Now, dispatchers are telling callers they need to start chest-compression-only CPR and the dispatcher begins giving instructions.

“In the City of Mesa alone, this resulted in 13 lives saved from November 2011 to January 2012,” said Bentley J. Bobrow, MD, a member of the Sarver Heart Center Resuscitation Research Group who is head of the Arizona Department of Health Services Emergency and Trauma Services Bureau and director of the AZ SHARE program—Saving Hearts in Arizona Registration and Education.

AZ SHARE continues to provide dispatcher training. For information, please visit [AZSHARE.gov](http://AZSHARE.gov). ♥

# Charitable Gift Annuities Benefit Center



*Jim and Linda Lee of Prescott, Ariz., donated a charitable gift annuity and established the Jim and Linda Lee Memorial Endowment that will be used to provide new equipment for future researchers and scientists to take their research in cardiovascular disease to new heights.*

If you would like to support the UA Sarver Heart Center, but you're concerned about your income during your retirement years, a charitable gift annuity may be right for you.

### How It Works

Through a simple contract, you make a donation of cash, stocks or other assets to the Sarver Heart Center through the University of Arizona Foundation. In return, the UA Foundation agrees to pay you (and someone else, if you choose) a fixed amount each year for the rest of your life.

In addition to providing a gift to the Sarver Heart Center and receiving fixed payments for life, you also receive these benefits:

- Your initial gift is partially income tax-deductible.
- Your charitable gift annuity payments are partially income-tax free throughout your estimated life expectancy.
- Your payments are not affected by ups and downs in the economy.
- The gift annuity can be for one or two people, so your spouse or another loved one can also receive payments for life.
- If you use appreciated stock to make a gift, you can usually eliminate capital gains tax on a portion of the gift and spread the rest of the gain over your life expectancy.

### Your Rate

- Generally, the older you are at the start of your charitable gift annuity, the higher your payments.
- These rates are the maximum rates recommended by the American Council on Gift Annuities and are adjusted periodically.

One Life		Two Lives	
Your Age	Rate of Return	Your Ages	Rate of Return
50	3.7%	50/55	3.3%
55	4.0%	55/60	3.7%
60	4.4%	60/65	4.0%
65	4.7%	65/70	4.4%
70	5.1%	70/75	4.8%
75	5.8%	75/80	5.3%
80	6.8%	80/85	6.1%
85	7.8%	85/90	7.3%
90+	9.0%	90/95+	8.8%

Not all organizations offer charitable gift annuities at the above ages and rates. Contact the Sarver Heart Center Development Office at 520-626-4146 or heart@u.arizona.edu for a personalized illustration or for more information.

# Alliance Beverage Makes Philanthropy a Part of Life

Alliance Beverage Distributing Company, based in Phoenix, believes that philanthropy should be a part of everyday life – a philosophy that begins with their president, Mr. Robert E. Smith. He says, “We are blessed to have the ability to give back in the way that we do.”

This year will mark the 25th anniversary of Alliance Beverage’s signature fundraising event and the 20th year that the UA Sarver Heart Center has been among the charities supported through Alliance’s efforts. The Pioneer Classic Golf Tournament, the signature celebration event for Alliance’s fundraising efforts, has grown from the first year with fewer than 25 participants to now more than 500 golfers and participants.

In 1993, the company honored Jim Shocklee, a heart transplant patient and former Alliance Beverage Distributing Company employee, by naming the Sarver Heart Center as a beneficiary of their efforts. From a significant pledge to the Jack G. Copeland, MD Endowed Chair in Cardiothoracic Surgery to investigator awards made to Sarver Heart Center members on the Phoenix campus, Alliance Beverage has made a tremendous impact on the Center.

“On behalf of the many patients and families that will benefit from Bob’s leadership and dedication, we thank Alliance Beverage for their support and wish them every success as they continue with the Pioneer Golf Classic,” says Gordon A. Ewy, MD, director of the UA Sarver Heart Center. “We remain grateful to be among the worthy charities that benefit from their investment and hope to continue to make them proud of their decisions to support the Center.”



# UA Sarver Heart Center Tucson Lecture Series 2012-2013

*in collaboration with Pima County Public Library*



**Pima County Public Library**

For several years the UA Sarver Heart Center has offered monthly chest-compression-only CPR training classes. This year these information sessions are being expanded to combine CCO-CPR with heart health lectures in the Tucson community at Pima County Libraries.

While you can't change your family's genetics, you can understand your medical conditions and lifestyle choices that can put you at higher risk for heart disease. Join us to learn how to prevent and manage heart diseases and stroke at these community lectures presented by leading physicians, scientists and dietitians from the University of Arizona Sarver Heart Center and UA Medical Center.

You'll also learn how to respond if you witness a sudden cardiac arrest. A man over age 40 has a one in eight chance of suffering a cardiac arrest. Learn this lifesaving skill! Someone's life may be in your hands.

**All lectures are free and open to the public. Free parking is available.**

**Reservations requested, but not required.**

**Please email [heart@u.arizona.edu](mailto:heart@u.arizona.edu) or call 520-626-4146.**

- 5:30 p.m. Doors Open**
- 5:40 p.m. Chest-Compression-Only Video and Hands-on Skills Training**
- 6 p.m. Lecture on Heart Health Topic**
- 6:40 p.m. Question & Answer Session**
- 7 p.m. Chest-Compression-Only Video and Hands-on Skills (repeated)**



- **Monday, September 10, 2012**  
***Saving a Generation from Diabetes: The Role of Food and Exercise***  
Betsy Dokken, NP, PhD, and Stephanie Olson, RD, CDE  
**Valencia Library**  
202 W. Valencia Rd., Community Room
- **Wednesday, October 24, 2012**  
***Winning the Battle over Heart Disease: The Role of Diet and Exercise***  
Janet Funk, MD, and Heather Danielson, RD  
**Himmel Library**  
1035 N. Treat Ave., Community Room
- **Wednesday, November 14, 2012**  
***Stroke Update: Caring for the Survivor and Caregiver***  
Leslie Ritter, PhD, RN  
**Joel D. Valdez Main Library**  
101 N. Stone Ave., Community Room LL1  
Note: Free parking begins at 5 p.m.
- **Tuesday, December 11, 2012**  
***Keeping the Beat: What's New in Drugs to Treat Arrhythmias?***  
Peter Ott, MD  
**Miller-Golf Links Library**  
9640 E. Golf Links Rd., Community Room
- **Wednesday, January 9, 2013**  
***So, You're 40 and Feel Fine: It's Time to Be Serious about Heart Attacks***  
Gordon A. Ewy, MD  
**Murphy-Wilmot Library**  
530 N. Wilmot Rd., Community Room
- **Wednesday, February 13, 2013**  
***Fall in Love with the Heart Health Diet***  
Shari Schoentag, RD, CNSC  
**Wheeler Taft Abbett Sr. Library**  
7800 N. Schisler Dr., Marana, Children's Room
- **Wednesday, March 13, 2013**  
***Eating Heart Healthy on a Budget***  
Susan Bristol, MS, RD, CNSC, with Leslie Guzman, Phil Lewis, Meghan Smith and Christina Caple  
**Woods Memorial Library**  
3455 N. 1st Ave., Community Room
- **Wednesday, April 10, 2013**  
***New Approaches to Opening Arteries: Update on Surgery and Interventional Approaches***  
Karl B. Kern, MD and Kapildeo Lotun, MD  
**Kirk-Bear Canyon Library**  
8959 E. Tanque Verde Rd., Community Room
- **Wednesday, May 8, 2013**  
***Controlling High Blood Pressure and Preventing Heart Failure***  
Lorraine Mackstaller, MD  
**Murphy-Wilmot Library**  
530 N. Wilmot Rd., Community Room

ADDRESS SERVICE REQUESTED

UA Sarver Heart Center  
*Green Valley*  
**Lecture Series** ..... 2012 – 2013

*Presented by Green Valley Recreation, Inc.*

Join us for another year of heart health lectures in Green Valley!

Free and open to the public. Presentations are held Thursdays at 10 a.m.  
at Canoa Hills Social Center, 3660 S. Camino del Sol, Green Valley.

No reservation required. Refreshments provided.

- ♥ **October 18, 2012** – Janet Funk, MD  
Winning the Battle over Heart Disease: The Role of Diet & Exercise
- ♥ **November 15, 2012** – Lorraine Mackstaller, MD  
Controlling High Blood Pressure and Preventing Heart Failure
- ♥ **December 20, 2012** – Gordon A. Ewy, MD  
Stress and the Heart
- ♥ **January 17, 2013** – Karl B. Kern, MD, and Kapildeo Lotun, MD  
New Methods to Opening Arteries: Update on Surgery  
and Interventional Approaches
- ♥ **February 21, 2013** – Peter Ott, MD  
Keeping the Beat: What's New in Drugs to Treat Arrhythmias?
- ♥ **March 21, 2013** – Leslie Ritter, PhD, RN  
Stroke Update: Caring for the Survivor and Caregiver
- ♥ **April 18, 2013** – Betsy Dokken, NP, PhD  
Controlling Diabetes: The Role of Food and Exercise

## Stroke Support Groups in Tucson and Green Valley

Sharing similar problems helps stroke survivors, caregivers and their family members learn to live with the changes in their lives. Stroke support groups offer chances to share concerns, lift each other up, unite around common experiences and find positive solutions.

**The Green Valley Stroke Support Group** meets every second Thursday of the month, from 10 a.m. - 11 a.m. in the Zuni Room, La Perla at La Posada.

**The Tucson Community Stroke Support Group** meets every second Monday of the month in the University of Arizona Medical Center - University Campus, Cafeteria Dining Room C, from 10 a.m. - 11 a.m. Please park in the UAMC Patient/Visitor Parking Garage or request valet parking at the entrance to the hospital's main lobby.

**For more information and to  
RSVP for either group,  
please call 520-626-2901**